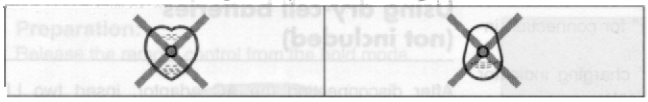
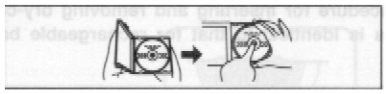
Concerning Compact Discs

Only compact discs bearing this mark can be used with this unit.

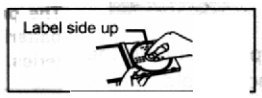
However, continued use of irregular shape CDs can damage the unit.



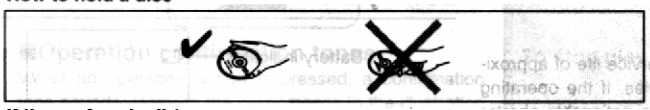
How to remove a disc from its case



How to store the disc in its case



How to hold a disc



If the surface is dirty

Wipe it with a damp cloth and then wipe dry.
Wipe from the center toward the circumference.

Handling precautions

- If you are taking the CD from a cold to a warm environment, moisture may form on the CD. Wipe this off with a soft, dry, lint-free cloth before using the CD.
- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not attach labels or stickers to CDs. (Do not use CDs with exposed adhesive from tape or left over peeled off stickers.)
- Do not use scratch-proof protectors or covers other than those specified for use with this unit.

Storage precautions

Be sure to store CDs in their cases to protect them from dust, scratches, and warping.

Do not place or store CDs in the following places

- Locations exposed to direct sunlight
- Humid or dusty locations
- Locations directly exposed to a heat vent or heating appliance
- In the glove compartment or on the rear deck of an automobile

Portable CD player

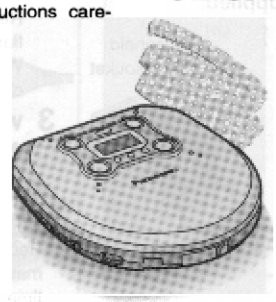
Panasonic

Operating Instructions

Dear Customer

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully.

SL-SX270/SL-SX220 /SL-SX221C



Note:
The "EB" indication shown on the packing case indicates United Kingdom.

Supplied Accessories

Check the packing carton for these accessories.

AC adaptor . . . . . 1 pc.
For United Kingdom (RFEA403B-S)
For others (RFEA403A-S)
Stereo earphones . . . . . 1 pc.
SL-SX270
(RFEV335P-KS)
SL-SX220 SL-SX221C
(RFEV334P-KS)

SL-SX270
Wired remote control . . . . . 1 pc.
(RFEV015PCKS)
SL-SX221C
Car adaptor . . . . . 1 pc.
(SH-CDC10EY)
Car stereo cassette adaptor . . . . . 1 pc.
(SH-CDM10BPYK)

Use numbers indicated in parentheses when asking for replacement parts.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

EB GN

Matsushita Electric Industrial Co., Ltd.
Osaka 542-8588, Japan

En RQT5363-B
F1299KK0

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPLIANCE TO RAIN, SPLASHING, DRIPPING OR MOISTURE.

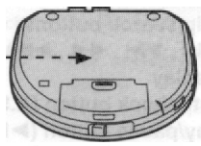
Marking sign is located on bottom of the unit.

SL-SX270 : indicates a feature which can be enjoyed with SL-SX270.

SL-SX220 : SL-SX220 only.

SL-SX221C : SL-SX221C only.

CLASS 1
LASER PRODUCT



Bottom of the unit

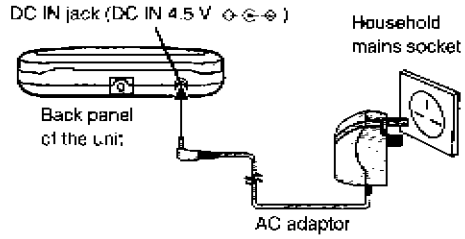
DANGER	INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.	(Bottom of product)
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.	(Påsat under apparatet)
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.	(Tuotteen pohjassa)
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.	(Apparatens undersida)
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.	(Produktets underside)
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.	(Unterseite des Gerätes)

Power Supply Preparations

Refer to the specifications (page 6) for information on operating times when using rechargeable batteries or dry-cell batteries.

Using the AC adaptor

Connect the AC adaptor supplied.



Note

- The configuration of the AC adaptor differs according to the area.
- The unit is in the standby condition when the AC adaptor is connected. The primary circuit is always "live" as long as the AC adaptor is connected to an electrical outlet.

Using rechargeable batteries (not included)

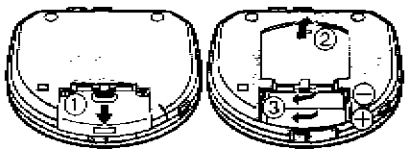
Obtain the optional rechargeable batteries. (page 6)
For United Kingdom:
- Optional batteries (P-3GAVE/2B)

For others:
- Optional batteries (P-3GAVT/2B)

Be sure to recharge the batteries before using them. The unit cannot be used to charge rechargeable batteries other than those specifically designed for it.

Recharging procedure

1 **Insert the special rechargeable batteries into the unit.**



2 **Connect the AC adaptor.**
(Refer to "Using the AC adaptor" for connection instructions.)
Recharging starts and the "⊏" charging indicator flashes on and off on the unit's display.
When the rechargeable batteries fully recharge the charging indicator disappears.

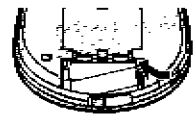
3 **When recharging is complete, unplug the AC adaptor from the household mains socket and the DC IN jack.**

Note

- Rechargeable batteries have a service life of approximately 300 charge-discharge cycles. If the operating time on one full charge becomes noticeably shorter than it used to be, the battery has reached the end of its service life and should be replaced.
- Recharging may only be performed when the unit is powered off. (It is not possible to recharge the batteries while playing a CD.)
- The AC adaptor and rechargeable batteries may become warm while recharging is in progress. This is not a malfunction.

If the battery lid comes loose
Slide the lid back into place horizontally.

Removing batteries
Push up on the battery in the direction indicated by the arrow. Then lift it out.



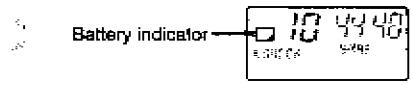
Using the car adaptor

The SL-SX221C comes with a car adaptor. Be sure to use the adaptor specially designed for this model. (Refer to the separate installation instructions.)
Be sure to obtain the car adaptor (SH-CDC9) for SL-SX270 and SL-SX220, available as an optional accessory.
The car adaptor can be used to recharge the unit's batteries while in the car.

Using dry-cell batteries (not included)

After disconnecting the AC adaptor, insert two LR6 (UM-3) alkaline batteries.
The procedure for inserting and removing dry-cell batteries is identical to that for rechargeable batteries.

Battery indicator



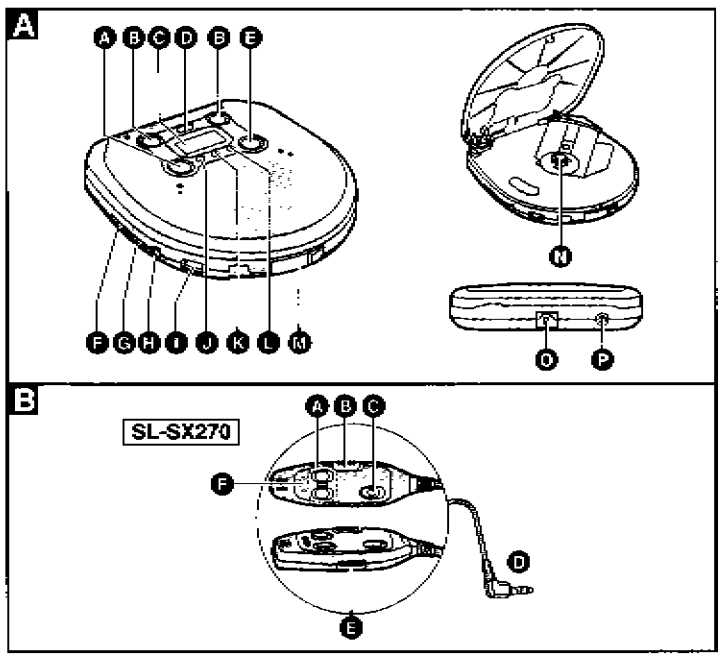
This indicator flashes on and off when the batteries are almost out of power. Power is cut off completely a short while later.
Rechargeable batteries: Recharge batteries.
Dry-cell batteries: Replace batteries with new ones.

Note

- The length of time the unit will continue to operate between when the battery indicator starts flashing and when the power is cut off differs depending on the type of batteries used.
- The battery indicator may not flash if rechargeable batteries other than those designated by Panasonic are used.

If the unit malfunctions or freezes during use, disconnect the power sources (the AC adaptor or batteries).
Re-connect the power source and continue operation.

Location of Controls



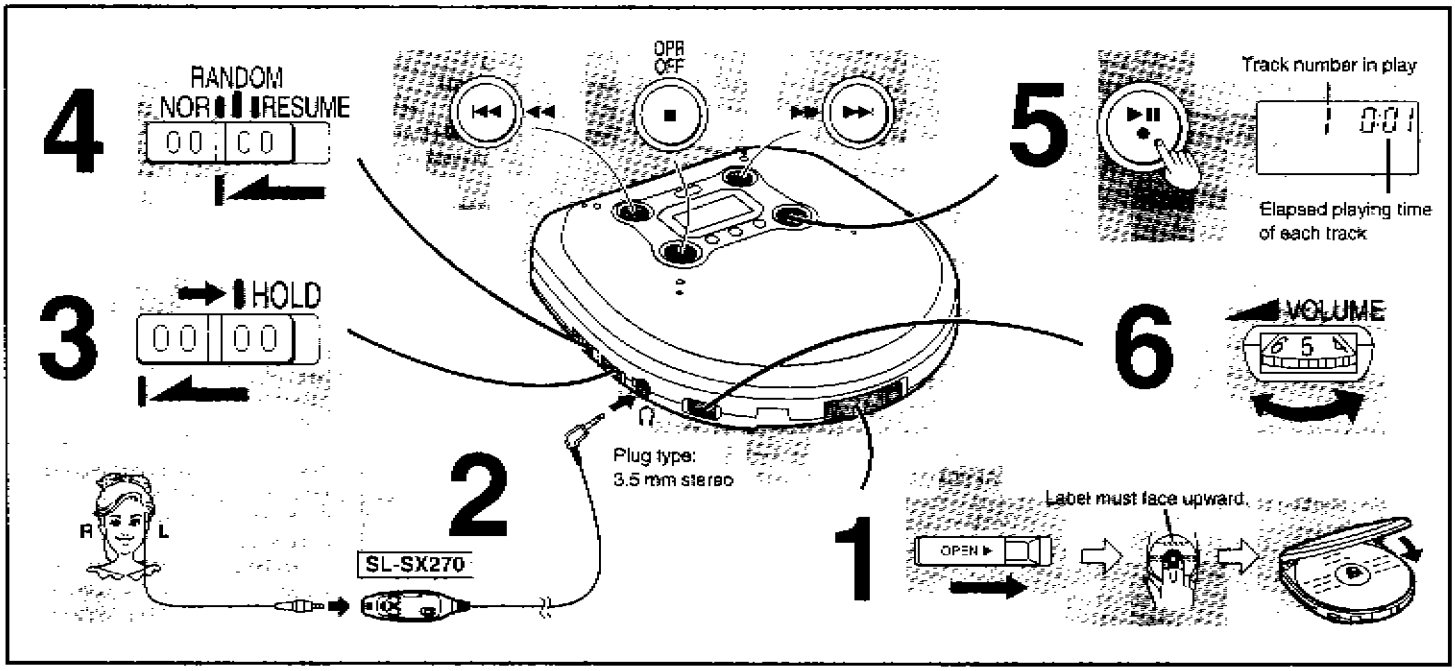
Portable CD Player A

- Ⓐ **Stop/operation off button (■,OPR OFF)**
- Ⓑ **Skip/search buttons (◀◀, ▶▶| ◀◀ , ▶▶)**
- Ⓒ **Display**
- Ⓓ **Anti-shock button (A.SHOCK)**
- Ⓔ **Play/pause button (▶❚❚)**
- Ⓕ **Play mode selector (NOR, RANDOM, RESUME)**
- Ⓖ **Hold switch (HOLD)**
- Ⓗ **Headphone jack (🎧)**
- Ⓘ **Headphone volume control (VOLUME)**
- Ⓙ **EQ button (EQ)**
- Ⓚ **Memory/recall button (MEMORY/RECALL)**
- Ⓛ **Repeat button (↻)**
- Ⓜ **Open switch (OPEN)**
- Ⓝ **CD release button (PUSH)**
- Ⓞ **Hole for car mounting base**
- Ⓟ **DC IN jack (DC IN 4.5 V ⟡⊖⊕⟡)**

Wired remote control SL-SX270 B

- Ⓐ **Skip/search buttons (+,−)**
- Ⓑ **Hold switch (HOLD)**
- Ⓒ **Play/stop/off button**
- Ⓓ **Plug**
- Ⓔ **Volume control (VOL)**
- Ⓕ **HOLD indicator**

Sequential Play Basic Play



Follow steps 1–6.

In step 2, connect the stereo earphones and the wired remote control (SL-SX270) to the headphone jack [🎧]. **(Plug in firmly.)**

- Play stops automatically when all the tracks have been played.
- If the unit has been connected to the car audio system, adjust the volume level between 4 and 6 on the unit, then adjust the volume level on the system.

Operation	Button	Display/reference
To pause play	Press during play.	Press again to restart play
To stop play **Stop mode**	Press during play.	Total number of tracks; Total playing time
To turn off the unit **Off mode**	Press during stop mode.	
Skipping tracks	Press during play. (Backward) (Forward)	• During program play (page 4), these buttons are used to skip forward or back through the programmed sequence of tracks. • During random play (page 4), the skip buttons cannot be used to skip back to tracks that were played previously in the random sequence. • During program play, random play or 1-track repeat play (page 4), search operation is limited to the current track only.
Searching through tracks	Press and hold during play.	

For your reference:

"no dISC" indication

This indication appears for about 30 seconds if [▶II] is pressed when no disc is loaded in the unit or if the disc is not properly secured.

"OPEn" indication

This indication appears for about 10 minutes when the cover is opened. (However, the indication does not appear when the unit is powered off.)

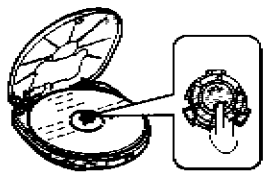
Auto power off function

If the unit is left in stop or paused status for approximately 10 minutes, the unit powers itself off automatically in order to prevent the batteries from running down.
(If no disc is loaded in the unit, it powers itself off in 30 seconds.)

Removing discs

1. **Press [■,OPR OFF] to stop play and disc's rotation.**
2. **Slide [OPEN] to open the lid.**
3. **Press [PUSH] to release the disc.**

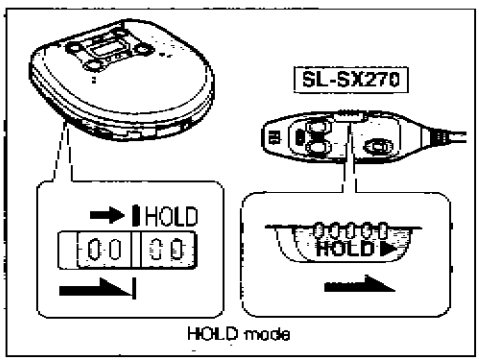
Do not stop the disc by hand or try to remove it before it stops rotating. This can damage CDs.



Note

Never insert foreign objects into the unit body.

HOLD Function



This function causes the unit to ignore short, accidental button presses. (The disc lid can still be opened and closed.)

The HOLD function prevents the following:

- Powering on the unit accidentally (which can cause the batteries to run down).
- Play being cut off unexpectedly in the middle of a selection.

SL-SX270

The unit and wired remote control have HOLD functions, each of which works independently.
(The HOLD indicator turns green when the remote control is in HOLD position.)

To use the HOLD function

Set [HOLD] to the HOLD position.

"hoLd" indication

When the unit is in HOLD status, pressing any button causes the indication "hoLd" to appear on the display.

When the unit is powered off

The "hoLd" indication appears only when [▶II] is pressed.

Before operating the buttons

Be sure to move [HOLD] to release the unit from the HOLD mode.

Other Play Methods

The letters such as Ⓐ in the illustrations refer to the descriptions in the "Location of Controls" section. (See page 2.)

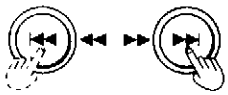
Skip play

The disc plays from the specified track through to the last track, then play stops automatically.
Preparation: Put unit in stop mode. (See page 3.)

1

Ⓕ

2 Select the desired track.

Ⓑ 

3

Ⓔ

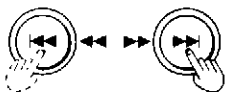
Program play

Up to 24 tracks can be entered in the program.
Preparation: Put unit in stop mode. (See page 3.)

1

Ⓕ

2 Select the desired track.

Ⓑ 

3 Register in sequence.
(The indication "M" and the programmed sequence appear on the display.)

MEMORY/RECALL

Ⓚ

4 Repeat steps 2 and 3 to program all the desired tracks.

5

Ⓔ

■ **To program the same track in the sequence more than once**
After step 3, press [MEMORY/RECALL] desired number of times.

■ **If "ƒ" is displayed**
No more tracks can be programmed.

■ **To confirm the contents of the program**
Press [MEMORY/RECALL] while the disc is playing. (The number of the programmed tracks appear on the display in sequence.)

■ **To delete the entire program**
Press [■, OPR OFF].

Random play

1

Ⓕ

2

Ⓔ

Release

Ⓕ

For your reference:
- It is also possible to press [▶▶|] while the unit is in stop mode to change the first track to be played. (All tracks are played eventually, regardless of which is played first.)
- Program play is not possible in the random mode.

Resume play

This function allows you to listen from the beginning of the track where play stopped because the unit was powered off (or switched to stop mode). It is useful when listening to CDs in the car, etc.

Ⓕ

Release

Ⓕ

For your reference:
- If [NOR, RANDOM, RESUME] is put in the [RESUME] position, the all-track repeat function will be activated automatically as soon as the unit is powered on.
- If power is cut off near the end of a track (off mode), playback may resume from the beginning of the next track.
- If the unit is powered off while a disc was playing and then a new disc is inserted, play will begin from the middle of the new disc because the unit remembers the position where play stopped on the previous disc.

Repeat function

Press during play or stop mode.

Ⓛ

The setting is switched in the sequence indicated below each time [↻] is pressed.

1-track repeat (1 ↻) ←
One track is repeated.
↓
All-track repeat (ALL ↻)
All the tracks on the disc are repeated.
↓
Cancel (no indicator is shown) ┘

For your reference:
If [↻] is pressed during program play, only the tracks in the program are repeated.
(The indication "ALL" is not displayed.)

Changing the sound quality

Press during play or stop mode.

EQ

Ⓙ

The setting switches in the sequence indicated below each time [EQ] is pressed.

S-XBS→TRAIN→Cancel (no indicator is shown)
↑ ┘

S-XBS:
Select this setting to boost the low-range response.

TRAIN:
Select this setting to avoid annoying other passengers with noise from your earphones while riding on the train, or to reduce fatigue when listening for a long period of time.

Anti-Shock Function

Anti shock works by reading audio data and storing it in memory. The unit then fills in interruptions caused by bumps and vibrations with data from the memory.

SL-SX270 : up to 40 seconds worth

SL-SX220 SL-SX221C : up to 10 seconds worth

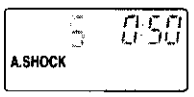
This unit also incorporates a powerful anti-shock mechanism that prevents skipping caused when play speed is changed by swinging of the unit.

Press during play or stop mode.

Ⓓ

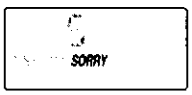
A.SHOCK

The following indicator appears on the display.

Ⓒ 

Note
If you have pressed [A.SHOCK] when the unit is in stop mode, press [▶❚❚] to start play.

When bumps continue repeatedly
The message "SORRY" appears on the display and sound is interrupted.

Ⓒ 

To cancel the anti-shock function
Press [A.SHOCK] again.

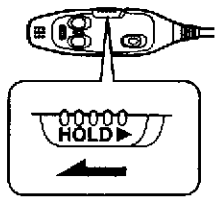
Note
- The anti-shock setting can be changed during play, but this may cause a slight interruption in the sound because the disc's rotation speed changes.
- During anti-shock operation, the disc rotates at a higher rate than usual to collect extra audio data. This could result in a slight increase in disc rotation noise.

Listening to sound with the unit connected to an audio system
The anti-shock function uses digital signal compression technology. It is recommended that the anti-shock function be canceled if the unit is connected to a home audio system.

Using the Wired Remote Control SL-SX270

The remote control can be operated regardless of the hold mode of the unit.

Preparation:
Release the remote control from the hold mode.



■Operation confirmation tones

When an operation button is pressed, a confirmation tone sounds. Refer to the parentheses in the illustration for the different types of confirmation tones.

How to use the wired remote control

To start play	Press once during off or stop mode. (Beep)
To stop play	Press once during play. (Beep...Beep)
To turn off the unit	Press and hold during play or stop mode. (Beep...Bee...p)

Skipping tracks	Press once during play **Forward** (Beep Beep) (Beep Beep Beep) **Backward**
Searching through tracks	Press and hold during play.
To adjust the volume	When adjusting the volume using the remote control, **position the volume control on the unit between 4 and 6.**

Using the Unit with Optional Accessories

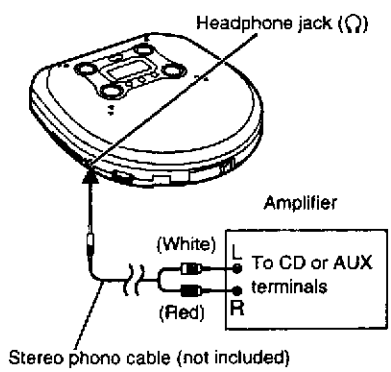
Using the unit with an audio system

Using stereo connection cable (not included), you can listen to CDs on your audio system.

- Connect the cable to the amplifier after turning off its power.
- Do not connect the cable to the PHONO jacks on the amplifier.
- Obtain the optional connecting cable if the amplifier comes with mini-phone jacks.
- Adjust the volume level on the amplifier.
- Set the unit's volume between 4 and 6.

SL-SX270

- You can connect speakers, active or otherwise, with an impedance of 1 kΩ or less to the headphone jack.



Using the unit with a car audio system

The SL-SX221C model comes with a car adaptor and car stereo cassette adaptor.
Please refer to the "Installation Instructions"(attached sheet).

Items to be purchased (SL-SX270/SL-SX220)
For connection to the car audio system:
Car stereo cassette adaptor (SH-CDM10A)

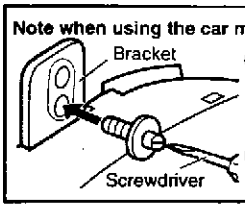
Connect the car stereo cassette adaptor to the unit's headphone jack.
(When doing this, keep the unit's VOLUME at a setting between 4 and 6.)

For securing the unit and connecting the power supply:
- Car adaptor (SH-CDC9)
- Car mounting kit (SH-CDF20)

Note
It may not be possible to use the unit with some types of car stereos owing to restrictions imposed by the construction of the car stereo cassette adaptor.

For further details, refer to the instructions of the part concerned.

Note when using the car mounting kit (SH-CDF20)

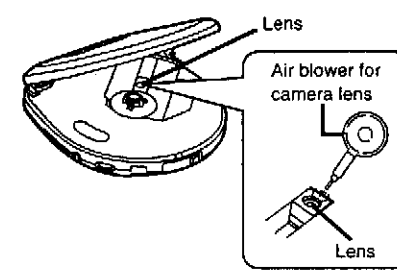


①Remove the screw from the bracket at the rear of the car mounting base.
②Replace the screw in the lower hole of the bracket.

Maintenance

If the surfaces are dirty
To clean this unit, wipe with a soft, dry cloth.
If the surfaces are extremely dirty, use a soft cloth dipped in a soap-and-water solution or a weak detergent solution.
- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

Maintaining the lens
Open the lid and clean the lens as shown in the figure.
Use a cotton swab to gently wipe off any finger-prints.
Recommended product: Lens cleaner kit (SZZP1038C)



Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.
If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your dealer for instructions.

Problem	Check this
Cannot close the cover.	Is the disc properly secured in place?
Cannot play discs.	•Is the unit in HOLD status? •Is the disc properly secured in place? •Is there condensation on the lens? (Wait for about an hour and then try again.)
Cannot remove disc.	Did you press [PUSH] to release the disc?
Tracks on disk do not play in order, starting with the first track.	Is [NOR, RANDOM, RESUME] in [NOR] position?
Cannot hear music—too noisy.	•Is the plug dirty? (Wipe away dirt on plug.) •Separate the unit from mobile phones. SL-SX220 SL-SX221C •Is the earphone plug inserted firmly? SL-SX270 •Are the earphone and wired remote control plugs inserted firmly?
TV picture is distorted. Radio reception is noisy.	Are you using the unit body too near a TV or tuner? (If the TV or tuner is connected to a simple indoor antenna, connect it to an outdoor antenna.)

Specifications

Audio (Anti-shock OFF)
No. of channels: 2 (left and right, stereo)
DA converter: 1 bit, MASH
Headphone output level: Max. 9 mW+9 mW/16 Ω (adjustable)

Pickup
Light source: Semiconductor laser
Wavelength: 780 nm

General
Operational temperature range: 0 °C–40 °C
Rechargeable temperature range: 5 °C–40 °C
Power supply: DC 4.5 V
Power consumption:

Power source	Anti-shock OFF/ON
When using AC adaptor	3.2 W/3.4 W

When recharging: Approx. 4.0 W

Play time:
(When used in hold mode with EQ canceled, at 25 °C, on a flat, stable surface)

Batteries used	Anti-shock OFF/ON
2 Alkaline batteries	SL-SX270 About 23 hours/ About 28 hours SL-SX220 SL-SX221C About 20 hours/ About 25 hours
Optional rechargeable batteries (P-3GAVE [T] /2B)	SL-SX270 About 11 hours/ About 13 hours SL-SX220 SL-SX221C About 10 hours/ About 12 hours

The play time may be less depending on the operating conditions.
Recharging time: 5 hours
Dimension (W×H×D): 128×25.9×131.5 mm
Mass: 237 g (with batteries)
191 g (without batteries)

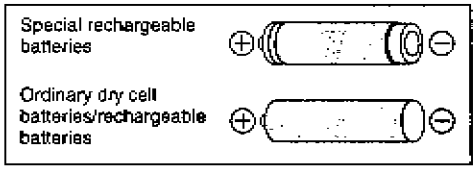
Note:
Specifications are subject to change without notice.
Mass and dimensions are approximate.

Cautions

Selection and care of rechargeable /dry cell batteries

■ Selection

As a safety precaution, the portable CD players made by Panasonic are constructed so it is impossible to recharge ordinary batteries.
Only batteries especially designed for this unit can be recharged.
Special rechargeable Ni-Cd batteries:
For United Kingdom
P-3GAVE/2B (set of 2)
For others
P-3GAVT/2B (set of 2)
For details, check with your dealer.



•If rechargeable battery play time is short after recharging, the batteries have reached the end of their service life. Replace them with the recommended replacements.
•Play time may be shorter than usual after recharging batteries for the first time or after they have been unused for a long time. Repeatedly recharge and discharge the batteries if this occurs to restore them to normal.

■ Care

To prevent battery damage, electrolyte leakage and short-circuiting, heed the following points.
•Do not peel off the covering on batteries and do not use if the covering has been peeled off.
•Align the poles ⊕ and ⊖ correctly when inserting the batteries.
•Do not mix different types or makes of batteries or old and new batteries.
•Remove the batteries if you do not intend to use the unit for a long time.
•Do not throw into fire, short-circuit, disassemble, or subject to excessive heat.
•Do not attempt to recharge dry cell batteries.
•Do not allow metal objects to touch the battery terminals as this may cause short-circuiting which is dangerous.
•When carrying batteries in a pocket or bag, ensure no metal objects such as necklaces are placed together with them. Contact with metal may cause short-circuiting which can cause a fire. For safety, carry the rechargeable batteries in the battery carrying case.

(For United Kingdom)

Notice about the rechargeable battery
The battery is designated recyclable.
Please follow your local recycling regulations.

When driving a car

In the interest of traffic safety, do not operate the unit while driving.

AC adaptor

•Handle the AC adaptor carefully. Improper handling is dangerous.
  •Do not touch it with wet hands.
  •Do not place heavy objects on top of it.
  •Do not forcibly bend it.
•Be sure to connect only the AC adaptor provided with the unit.
•Disconnect the AC adaptor from the power outlet if the unit is not going to be used for a long time.

Unit

No altering or remodeling
This can cause malfunctioning.
No dropping or strong impacts
This may damage the unit.
Locations to be avoided
Avoid using the unit in the following locations since they can cause malfunctioning.
1. Bathrooms and other moisture-prone places.
2. Warehouses and other dusty places
3. Very hot places near heating appliances, etc.

Do not leave the unit exposed to direct sunlight for long periods of time
This may deform or discolor the cabinet and may also cause malfunctioning.

Precautions for Listening with the Headphones or Earphones

•Do not play your headphones or earphones at a high volume. Hearing experts advise against continuous extended play.
•If you experience a ringing in your ears, reduce volume or discontinue use.
•Do not use while operating a motorized vehicle. It may create a traffic hazard and is illegal in many areas.
•You should use extreme caution or temporarily discontinue use in potentially hazardous situations.
•Even if your headphones or earphones are the open-air type designed to let you hear outside sounds, don't turn up the volume so high that you can't hear what's around you.